

FIG. 1

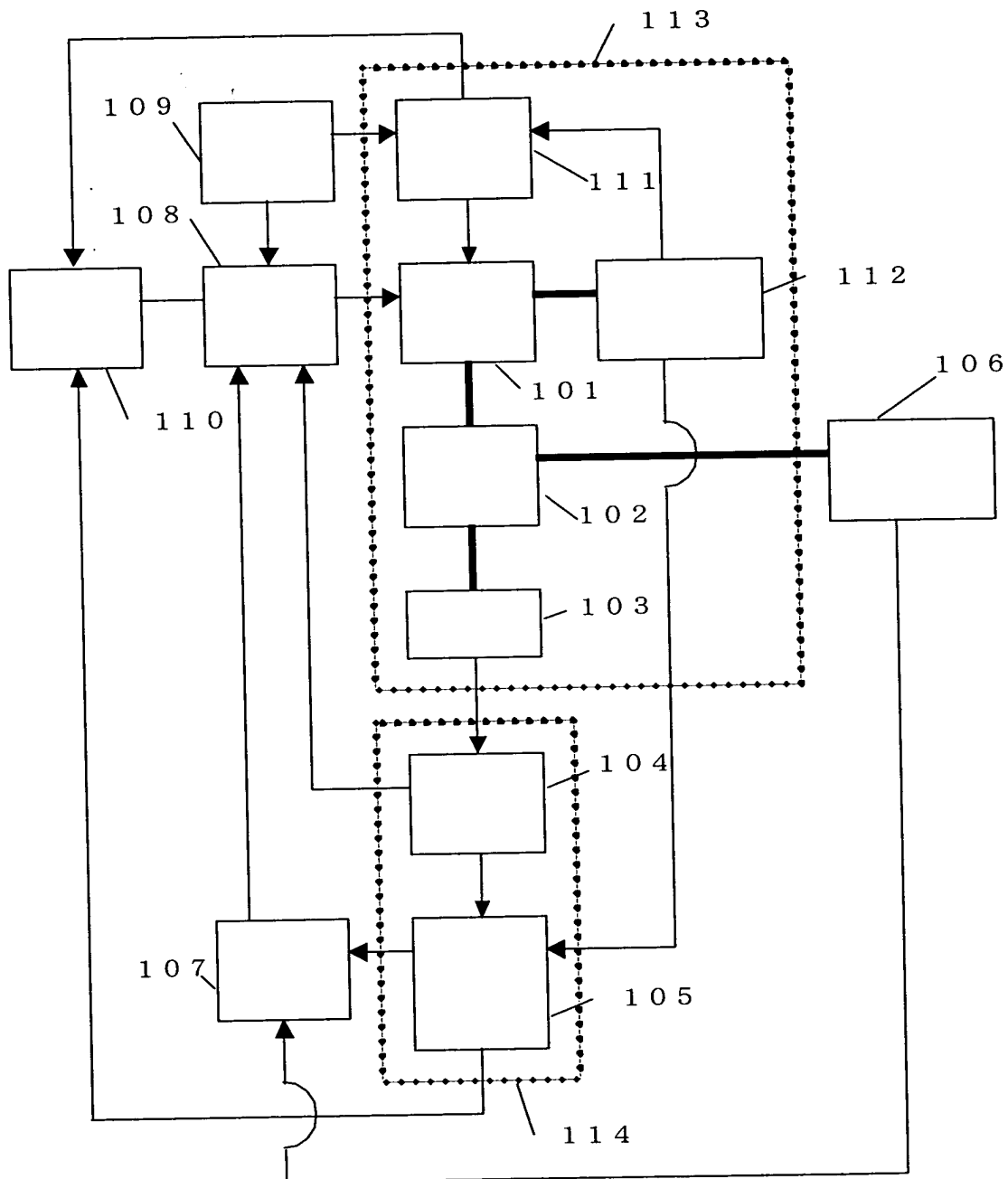


FIG.2

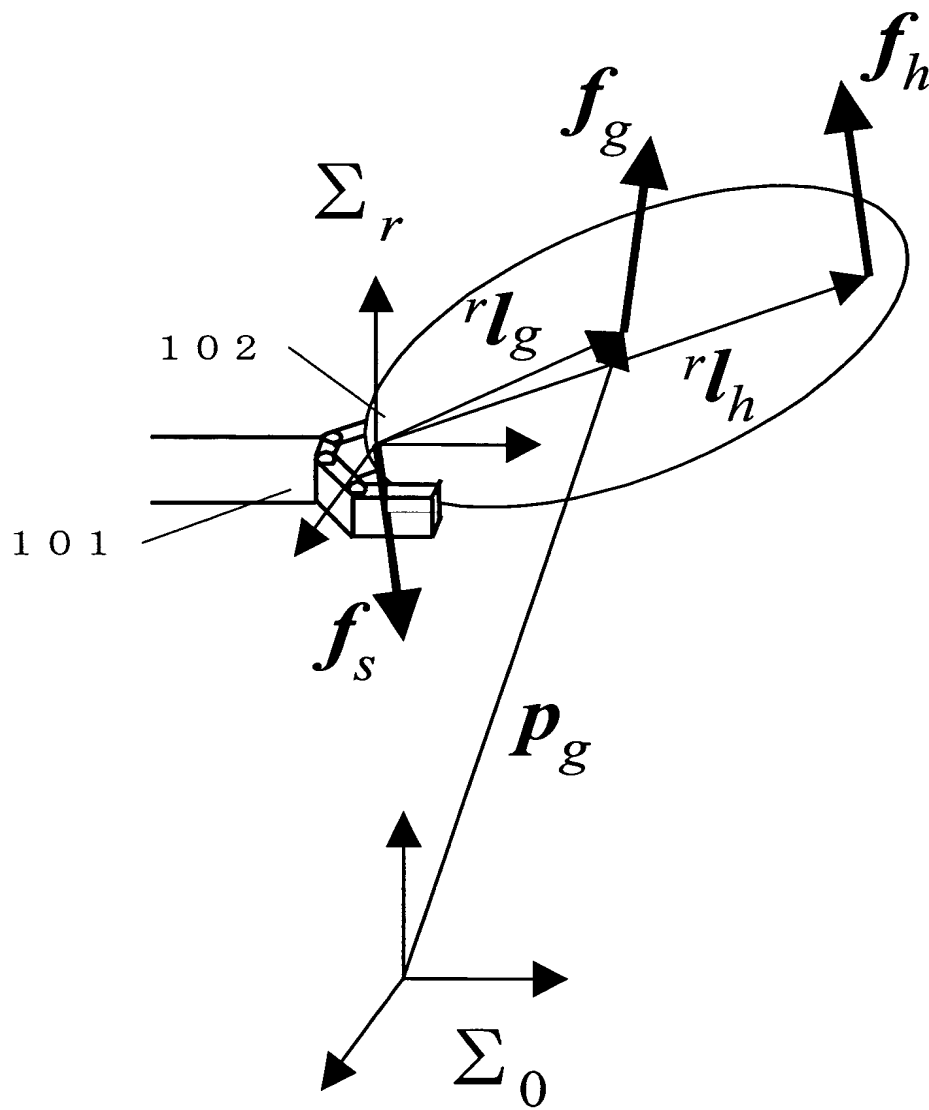


FIG.3

TIME	FORCE SENSOR VALUE	JOINT-ANGLE SENSOR VALUE
t(n)	P(n)	D(n)
⋮	⋮	⋮
t(1)	P(1)	D(1)
t(0)	P(0)	D(0)

FIG.4A

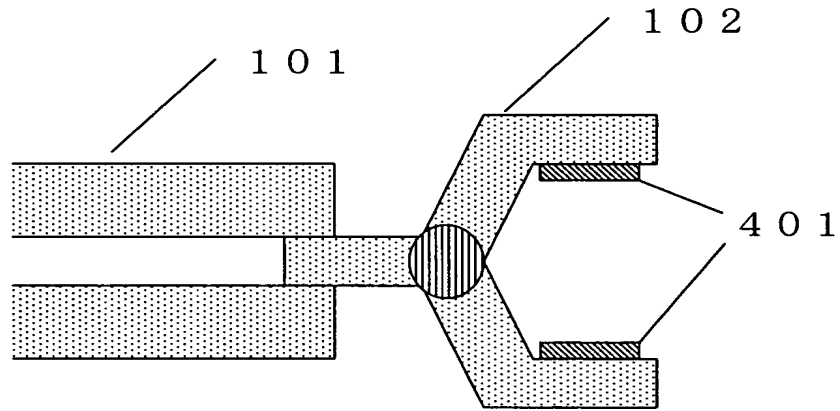


FIG.4B

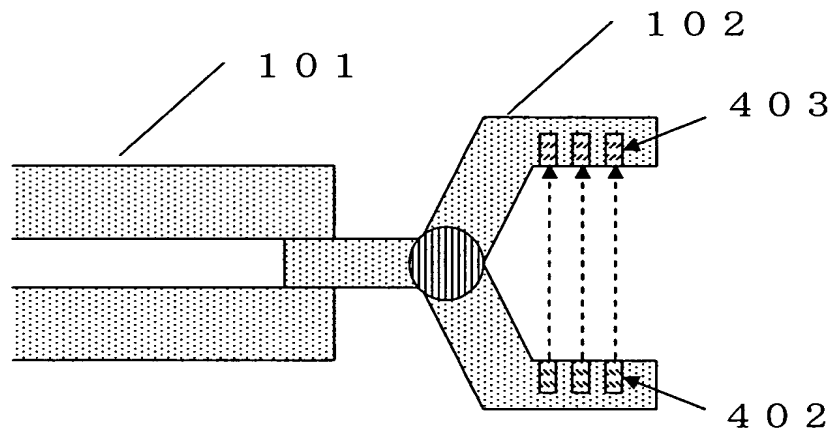


FIG.5A

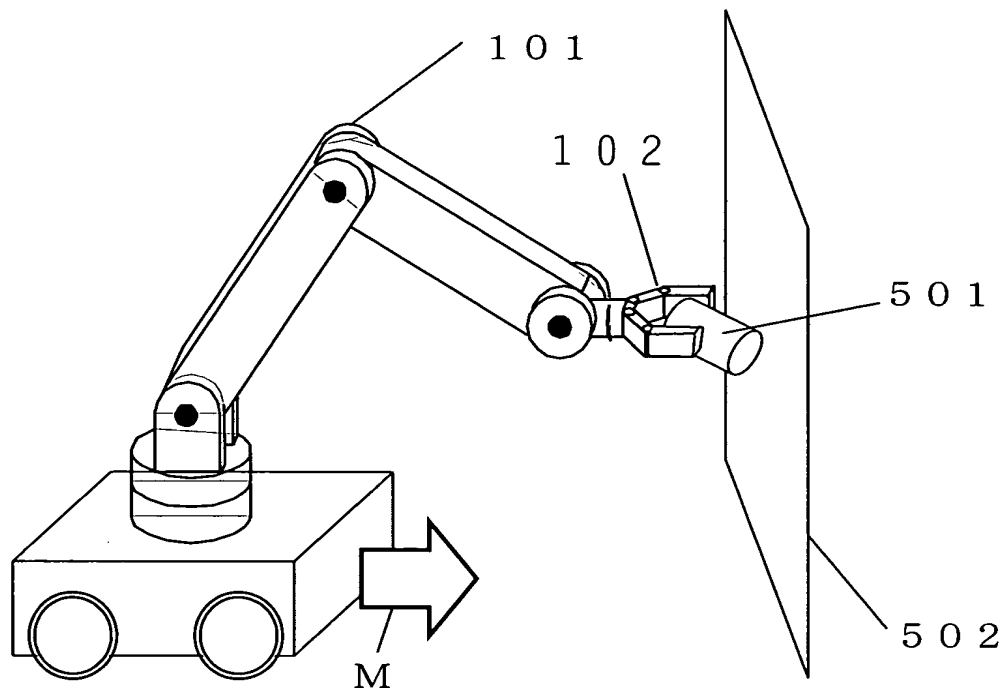


FIG.5B

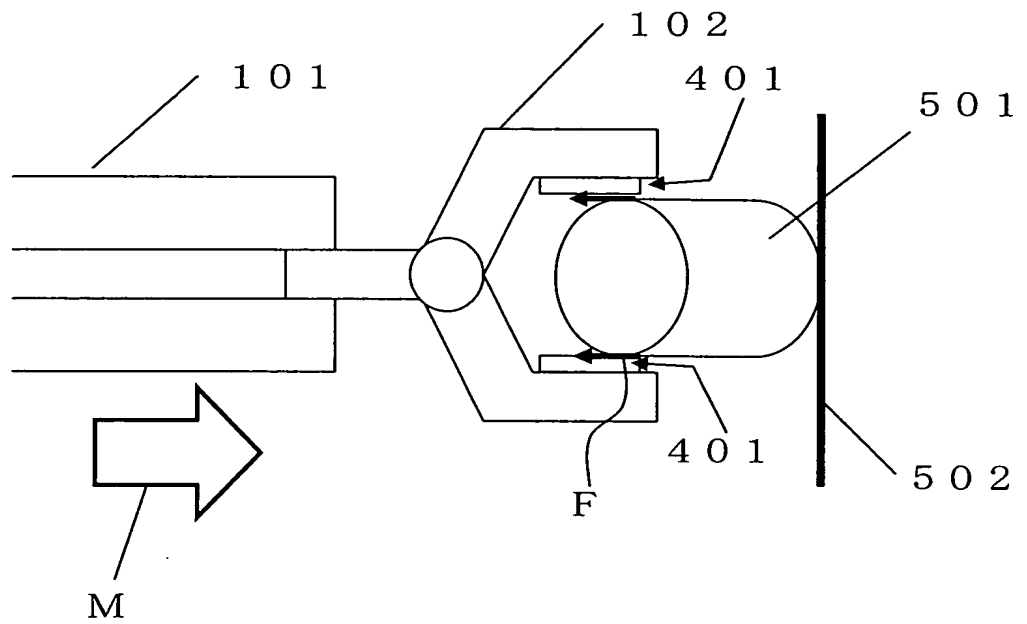


FIG.6

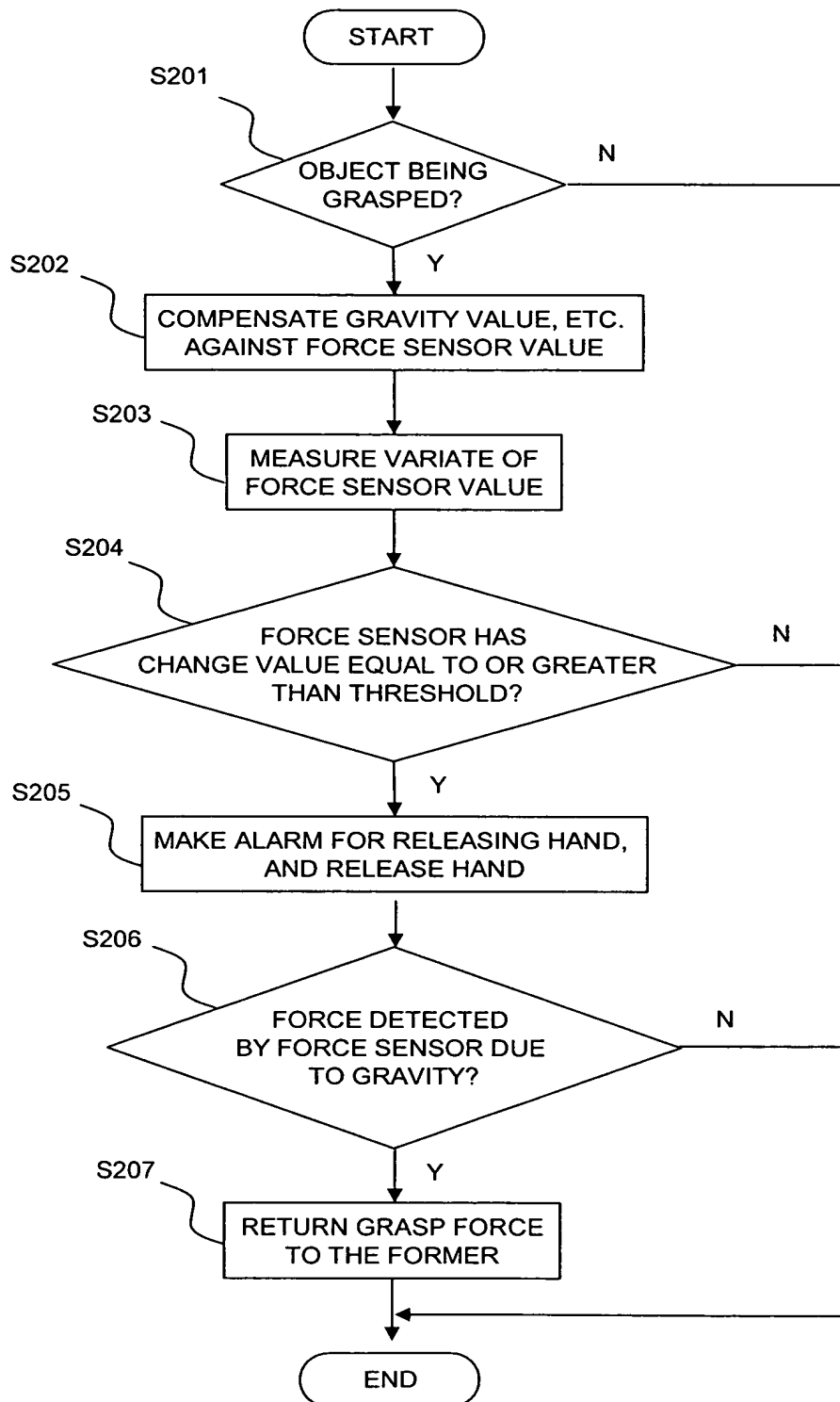


FIG.7

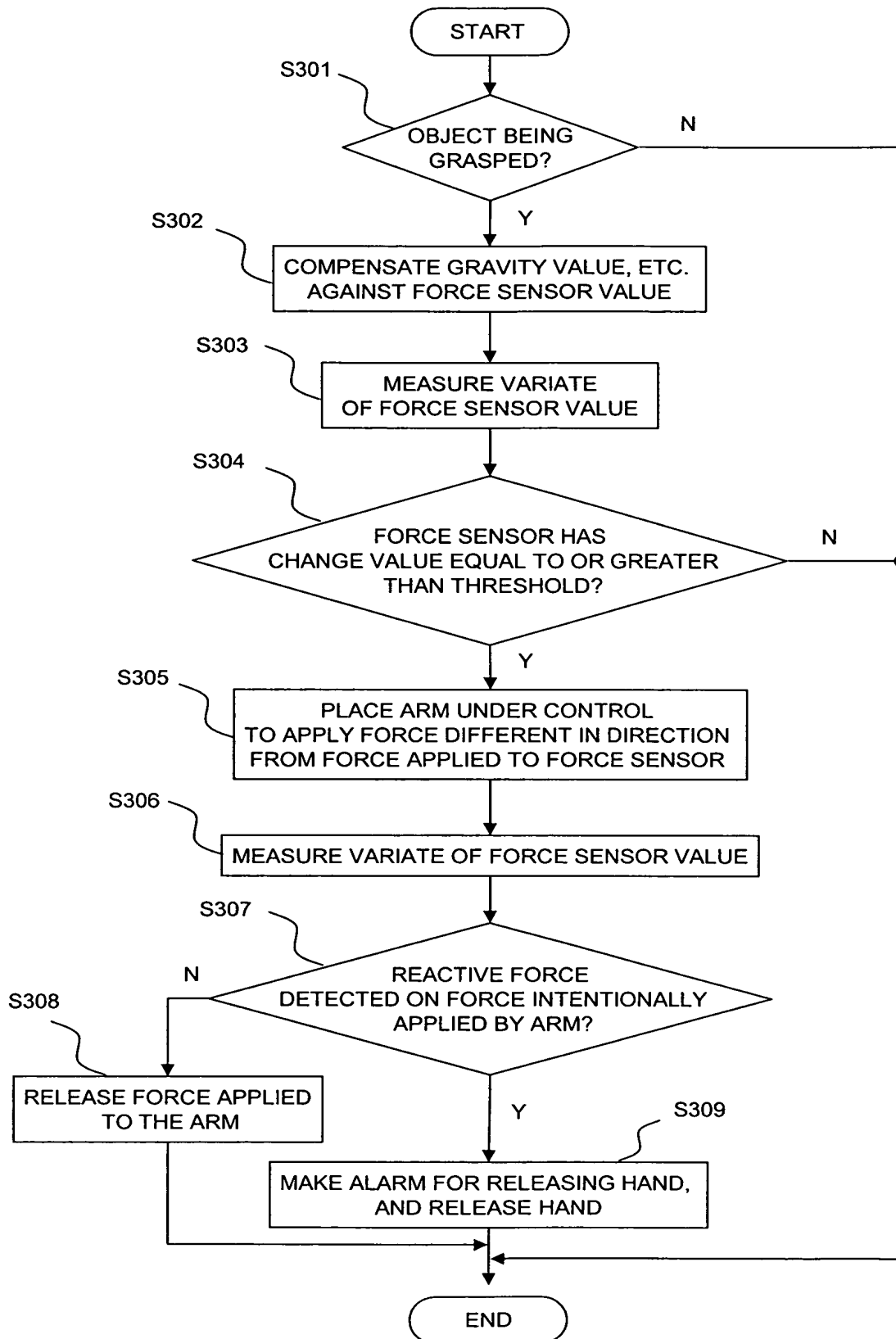


FIG.8

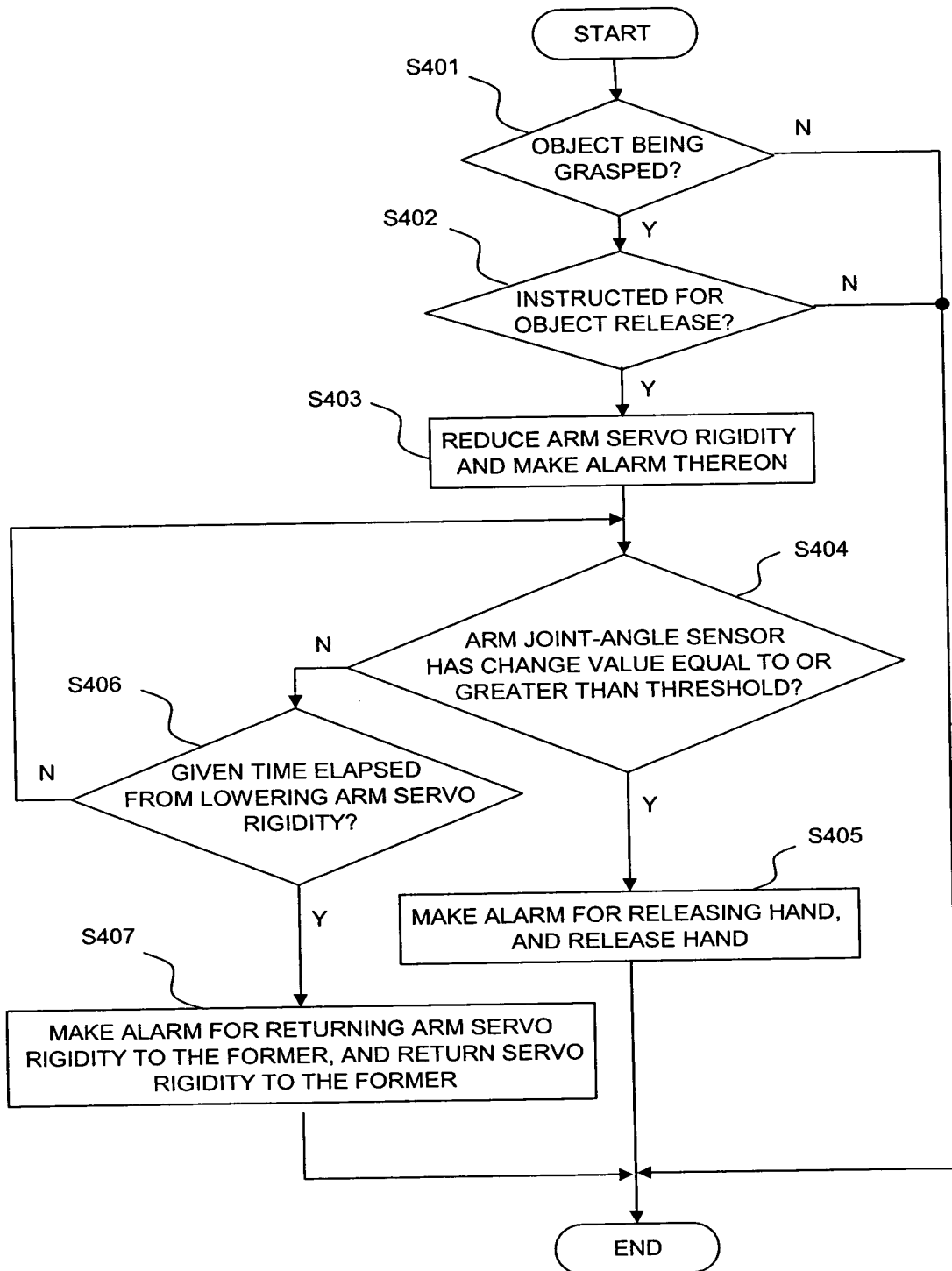




FIG.9

